# RTCA Special Committee 186, Working Group 3

## ADS-B 1090ES MOPS

### Meeting #20

**Teleconference on 27 February 2006** 

Proposed Note to add to the CPR section in Appendix A and to the Proposed "Change 1" to RTCA/DO-260A

Agreed to by: Saffell, Harman, Rowlan Prepared by: Gary Furr

#### **SUMMARY**

This Working Paper (version R1) recommends a requirement and Note that should be added to sections §A.1.7.5, §A.1.7.6, §A.1.7.7 and §A.1.7.8 for the purpose of suggesting that a test be run on the CPR boundary conditions.

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This Working Paper represents an approach agreed upon by Bob Saffell, Bill Harman and Stacey Rowlan to modify RTCA/DO-260A, Appendix A, paragraph §A.1.7.5 with the addition of a *Note* suggesting that a test be performed for the potential problem that was originally identified in Working Paper 1090-WP20-03 and discussed during the WG-3 teleconference on 13 February 2006.

The following suggested text of the requirement and *Note* replaces all of the previously suggested *Notes* and added requirements that were presented in Working Paper 1090-WP20-04.

The text below will be placed in the proposed "Change 1 to DO-260A" when it is distributed to SC-186 for the Final Review and Comment period, and all other changes that appear in 1090-WP20-07 that were specifically related to the proposed changes in 1090-WP20-04 will be removed.

### **Suggestion (revised during Teleconference #2):**

Add the following requirement and *Note* at the end of section §A.1.7.5 as new paragraph "g." Add the same onto the end of section §A.1.7.6 as new paragraph "7." Add the same onto the end of section §A.1.7.7 as new paragraph "h." Add the same on to the end of section §A.1.7.8, as defined in the Appendix to TSO C166, as new paragraph "h."

To guard against the possibility that the decoder selects a different value of NL from the value that was used by the encoder, a reasonableness test **shall** be applied.

*Note:* 

If the decoded value of longitude differs excessively from the previous value, then this should be considered an error. Furthermore, if this occurs when the latitude is close to an NL boundary, then an alternative decode should be made, trying the next nearest NL value, and if the resultant decode is consistent with the track, then the new decoded value should be used for the report.